

DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION

As below named inventors, we hereby declare that:

Our residence, post office address and citizenship are as stated below under our names.

We believe that we are the original, first and joint inventors of the subject matter which is claimed and for which a patent is sought on the invention entitled

ENZYME DERIVED FROM THERMOPHILIC ORGANISMS THAT FUNCTIONS AS A CHROMOSOMAL REPLICASE, AND PREPARATION AND USES THEREOF

the Specification of which

- ☐ is attached hereto
☒ was filed on April 8, 1998
as Application Serial No. 09/057,416
and was amended on _____ (if applicable).

We hereby state that we have reviewed and understand the contents of the above-identified Specification, including the claims, as amended by any amendment referred to above.

We acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, 1.56(a).

We hereby claim foreign priority benefits under Title 35, United States Code, §119 of any provisional application filed in the United States in accordance with 35 U.S.C. §1.119(e), or any application for patent that has been converted to a Provisional Application within one (1) year of its filing date, or any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed.

<u>APPLICATION</u> <u>NUMBER</u>	<u>COUNTRY</u>	<u>PRIOR FILED APPLICATION(S)</u> <u>(DAY/MONTH/YEAR FILED)</u>	<u>PRIORITY</u> <u>CLAIMED</u>
60/043,202	U.S.	April 8, 1997	YES

We hereby claim the benefit under Title 35, United States Code, §120 of any United States application listed below, and, insofar as the subject matter of each of the claims of this application is not disclosed in any prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56(a), which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

APPLICATION NO. _____ FILING DATE (DAY/MONTH/YEAR) _____ STATUS - PATENTED, PENDING, ABANDONED _____

We hereby appoint as our attorneys or agents the following persons: Jack Matalon, (Attorney, Registration No. 22,441); Stefan J. Klauber (Attorney, Registration No. 22,604); David A. Jackson (Attorney, Registration No. 26,742); Michael D. Davis (Attorney, Registration No. 39,161); William C. Coppola (Attorney, Registration No. P41,6867); Mark S. Cohen (Attorney, Registration No. P42,425); and Christine E. Dietzel (Agent, Registration No. 37,309). said attorneys or agents with full power of substitution and revocation to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

Please address all correspondence regarding this application to:

DAVID A. JACKSON, ESQ.
KLAUBER & JACKSON
411 HACKENSACK AVENUE
HACKENSACK, NEW JERSEY 07601

Direct all telephone calls to David A. Jackson at (201) 487-5800.

We hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

FULL NAME OF FIRST JOINT INVENTOR: OLGA YURIEVA
COUNTRY OF CITIZENSHIP: Russia
FULL RESIDENCE ADDRESS: 500 E. 63rd Street, Apt. 5E
New York, New York 10021
US
FULL POST OFFICE ADDRESS: 500 E. 63rd Street, Apt. 5E
New York, New York 10021
US

SIGNATURE OF INVENTOR *Olga Yurieva*

DATE 05/13/98

00642218 03100

FULL NAME OF SECOND JOINT INVENTOR: JOHN KURIYAN

COUNTRY OF CITIZENSHIP: United States

FULL RESIDENCE ADDRESS: 5060 Tibbett Avenue
Riverdale, New York 10477

FULL POST OFFICE ADDRESS: 5060 Tibbett Avenue
Riverdale, New York 10477

SIGNATURE OF INVENTOR

DATE

John Kuriyan
5/26/98

FULL NAME OF THIRD JOINT INVENTOR: MICHAEL E. O'DONNELL

COUNTRY OF CITIZENSHIP: United States

FULL RESIDENCE ADDRESS: 16 Maple Avenue
Hastings-on-Hudson, New York 10706

FULL POST OFFICE ADDRESS: 16 Maple Avenue
Hastings-on-Hudson, New York 10706

SIGNATURE OF INVENTOR

DATE

Michael E. O'Donnell
6/1/98

0042240 001800

FULL NAME OF FOURTH JOINT INVENTOR: DAVID JERUZALMI

COUNTRY OF CITIZENSHIP: United States

FULL RESIDENCE ADDRESS: 1161 York Avenue
Apartment 11i
New York, New York 10021

FULL POST OFFICE ADDRESS: 1161 York Avenue
Apartment 11i
New York, New York 10021

SIGNATURE OF INVENTOR

David Jeruzalmi

DATE

5/19/98

09642218 "081800

Applicant or Patentee: Olga Yurieva et al

Application or Patent No.: 09/057,416

Filed or Issued: April 8, 1998

For: ENZYME DERIVED FROM THERMOPHILIC ORGANISMS THAT FUNCTIONS AS A CHROMOSOMAL REPLICASE, AND PREPARATION AND USES THEREOF

VERIFIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY STATUS (37 C.F.R. §§ 1.9(f) AND 1.27(d)) - NONPROFIT ORGANIZATION

I hereby declare that I am an official empowered to act on behalf of the nonprofit organization identified below:

NAME OF ORGANIZATION THE ROCKEFELLER UNIVERSITY

ADDRESS OF ORGANIZATION 1230 YORK AVENUE, NEW YORK, NEW YORK 10021-6399

TYPE OF ORGANIZATION

- ☒ [X] University or other institution of higher education
- ☐ [] Tax exempt under Internal Revenue Service Code (26 U.S.C. §§ 501(a) and 501(c)(3))
- ☐ [] Nonprofit scientific or educational under statute of state of The United States of America
(Name of state _____)
(Citation of statute _____)
- ☐ [] Would qualify as tax exempt under Internal Revenue Service Code (26 U.S.C. §§ 501(a) and 501(c)(3)) if located in The United States of America
- ☐ [] Would qualify as nonprofit scientific or educational under statute of The United States of America if located in The United States of America
(Name of state _____)
(Citation of statute _____)

I hereby declare that the nonprofit organization identified above qualifies as a nonprofit organization as defined in 37 C.F.R. § 1.9(e) for purposes of paying reduced fees under Sections 41(a) and 41(b) of Title 35, United States Code, with regard to the invention entitled by inventor(s) described in

- ☐ [] the specification filed herewith
- ☒ [X] Application No. 09/057,416, filed APRIL 8, 1998
- ☐ [] Patent No. _____, issued _____

I hereby declare that rights under contract or law have been conveyed to and remain with the nonprofit organization with regard to the above-identified invention.

If the rights held by the above-identified nonprofit organization are not exclusive, each individual, concern, or organization having rights to the invention is listed below,* and no rights to the invention are held by any person, other than the inventor, who would not qualify as an individual inventor under 37 C.F.R. § 1.9(c), or by any concern that would not qualify as either a small business concern under 37 C.F.R. § 1.9(d) or a nonprofit organization under 37 C.F.R. § 1.9(e).

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*NOTE: Separate verified statements are required from each named person, concern, or organization having rights to the invention averring to their status as small entities. (37 C.F.R. § 1.27.)

FULL NAME _____

ADDRESS _____

☐ individual ☐ small business concern ☐ nonprofit organization

FULL NAME _____

ADDRESS _____

☐ individual ☐ small business concern ☐ nonprofit organization

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earlier of the issue fee and any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 C.F.R. § 1.28(b).)

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code; and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

NAME OF PERSON SIGNING WILLIAM H. GRIESAR

TITLE IN ORGANIZATION VICE PRESIDENT AND GENERAL COUNSEL

ADDRESS OF PERSON SIGNING 1230 YORK AVENUE, NEW YORK, NY 10021-6399

SIGNATURE  DATE 5/19/98

0364248 034300
003730" 37224950

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT(S) : Olga Yurieva *et al*
Serial No. : Unassigned
Filed : Herewith
FOR : ENZYME DERIVED FROM THERMOPHILIC
ORGANISMS THAT FUNCTIONS AS A CHROMOSOMAL
REPLICASE, AND PREPARATION AND USES THEREOF

ASSOCIATE POWER OF ATTORNEY

ASSISTANT COMMISSIONER FOR PATENTS
WASHINGTON, D.C. 20231

Dear Sir:

Please recognize the following attorneys as associate attorneys in the above-identified
Application:

Allan H. Fried	Registration No. 31,253
Michael A. Yamin	Registration No. 44,414

Please continue to forward all further communications to the undersigned.

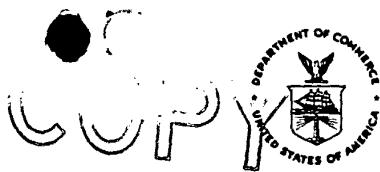
Respectfully submitted,



David A. Jackson
Attorney for Applicant
Registration No. 26,742

KLAUBER & JACKSON
411 Hackensack Avenue
Hackensack, New Jersey 07061
(201) 487-5800

0964248 081890



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
ASSISTANT SECRETARY AND COMMISSIONER
OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

DECEMBER 08, 1998

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KLAUBER & JACKSON
DAVID A. JACKSON
411 HACKENSACK AVENUE, 4TH FLOOR
HACKENSACK, NEW JERSEY 07601



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DEC 14 1998

KLAUBER & JACKSON

UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT



THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 08/26/1998

REEL/FRAME: 9409/0201
NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

HOWARD HUGHES MEDICAL INSTITUTE

DOC DATE: 07/28/1998

ASSIGNEE:

ROCKEFELLER UNIVERSITY, THE
1230 YORK AVENUE
NEW YORK, NEW YORK 10021-6399

SERIAL NUMBER: 09057416
PATENT NUMBER:

FILING DATE: 04/08/1998
ISSUE DATE:

STEVEN POST, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

FORM PTO-1595
(Rev. 6/93)

09-01-1998

U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

REC



IT

100804820

Attorney Docket No. 600-1-179N

To the Assistant Commissioner for Patents

1. Name of conveying party(ies):

Howard Hughes Medical Institute

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

3. Nature of conveyance:

☒ Assignment

☐ Merger

☐ Security Agreement

☐ Change of Name

Other: _____

Execution Date: July 28, 1998

2. Name and address of receiving party(ies):

Name: The Rockefeller University

Address: 1230 York Avenue

New York, New York 10021-6399

Additional name(s) & address(es) attached? ☐ Yes ☒ No

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: _____

A. Patent Application No.(s)

09/057,416

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: David A. Jackson

Address: KLAUBER & JACKSON

411 Hackensack Avenue, 4th Floor

Hackensack, New Jersey 07601

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41): \$40.00

☒ Enclosed

☐ Authorized to be charged to deposit account, if necessary - for overages or underpayments only

8. Deposit account number:

11-1153

(Attach duplicate copy of this page if paying by deposit account)

08/31/1998 BNGUYEN 00000198 09057416

01 FC:581

40.00 OP

DO NOT USE THIS SPACE

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

David A. Jackson, Reg. No. 26,742
Name of Person Signing

Signature

8/20/98
Date

Total number of pages including cover sheet, attachments, and document: 3

Mail documents to be recorded with required cover sheet information to:

Assistant Commissioner for Patents
Box Assignments
Washington, D.C. 20231

ASSIGNMENT

Assignment made July 7, 1998 by the Howard Hughes Medical Institute, a Delaware corporation, having a principal business address at 4000 Jones Bridge Road, Chevy Chase, MD 20815-6789 (the "Institute"), to The Rockefeller University, an education corporation organized and existing under the laws of the State of New York, with offices at 1230 York Avenue, New York, New York 10021-6399 ("Rockefeller").

Recitals

WHEREAS, the Institute and Rockefeller collaborate in the active conduct of medical research pursuant to a Collaboration Agreement between them dated as of August 12, 1986 (the "Collaboration Agreement");

WHEREAS, pursuant to the Collaboration Agreement, the Institute has agreed to assign to Rockefeller the Institute's rights with respect to inventions, discoveries, improvements, and other intellectual property, whether patentable or copyrightable (each a "subject property"), conceived or reduced to practice in the course of the research program conducted under the Collaboration Agreement by employees of the Institute; and

WHEREAS, research conducted pursuant to the Collaboration Agreement by John Kuriyan, Ph.D. and Michael E. O'Donnell, Ph.D. while employed by the Institute at Rockefeller has resulted in an invention entitled "Enzyme Derived From Thermophilic Organisms That Functions As A Chromosomal Replicase, And Preparation And Uses Thereof" (the "Invention").

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged by the Institute, the Institute agrees as follows:

1. Assignment. The Institute hereby assigns to Rockefeller any and all right, title, and interest of the Institute; any United States patent applications and all corresponding foreign patent applications, which are directed to the Invention (including, without limitation, the patent application entitled "Enzyme Derived From Thermophilic Organisms That Functions As A Chromosomal Replicase, And Preparation And Uses Thereof," filed in the United States Patent and Trademark Office on April 8, 1998, and assigned U.S. Serial No. 09/057,416), and any and all patents issued therefrom; all United States or foreign divisions and continuations based on any of the foregoing, and any and all patents issued therefrom; and all claims which are directed to the Invention and are contained in continuation-in-part applications or in patents which issue therefrom; all in accordance with and subject to the provisions of the Collaboration Agreement (including, without limitation, Section 4.1 thereof); and further authorize and request the Commissioner of Patents and Trademarks of the United States and any official of any country or countries foreign to the United States whose duty it is to issue patents on applications as aforesaid to issue all Letters Patent for the Invention to Rockefeller.

2. Cooperation. The Institute agrees to execute upon request such further assignments, documents, and other instruments as may be necessary or desirable fully and completely to assign the Institute's interests in the Invention to Rockefeller and to assist Rockefeller in applying for, obtaining, and enforcing patents, copyrights, or other rights in the United States and in any foreign country with respect to any such Invention.

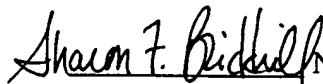
HOWARD HUGHES MEDICAL INSTITUTE

By: 

~~W. Maxwell Cowan, M.D., Ph.D.
Vice President and Chief Scientific Officer~~

State of Maryland
Montgomery County

Then personally appeared before me the above-named W. MAXWELL COWAN, known to me to be the Vice President and Chief Scientific Officer of the Howard Hughes Medical Institute, and acknowledged that he executed the foregoing instrument as the free act and deed of the Howard Hughes Medical Institute, and that he was authorized to execute said instrument, this 28th day of July, 1998.

 Notary Public

Sharon F. BRICKHILL (print name)

My commission expires 3/1/00

SHARON F. BRICKHILL
NOTARY PUBLIC STATE OF MARYLAND
My Commission Expires March 1, 2000

COPY



JANUARY 27, 1999

PTAS

KLAUBER & JACKSON
DAVID A. JACKSON
411 HACKENSACK AVENUE, 4TH FLOOR
HACKENSACK, NEW JERSEY 07601

600-1-179N
UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
ASSISTANT SECRETARY AND COMMISSIONER
OF PATENTS AND TRADEMARKS
Washington, D.C. 20231



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09/642218



UNITED STATES PATENT AND TRADEMARK OFFICE
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PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 09/28/1998

REEL/FRAME: 9486/0373
NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

JERUZALMI, DAVID

DOC DATE: 09/17/1998

ASSIGNEE:

ROCKEFELLER UNIVERSITY, THE
1230 YORK AVENUE
NEW YORK, NEW YORK 10021-6399

SERIAL NUMBER: 09057416
PATENT NUMBER:

FILING DATE: 04/08/1998
ISSUE DATE:

SHIRLIE SIMON, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

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U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

PATENTS ONLY

1998 SEP 23 11:10:52
Attorney Docket No. 600-1-179N

9.28.98

To the Assistant Commissioner for Patents

OPR/ENLANCE

1. Name of conveying party(ies):

David Jeruzalmi

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

3. Nature of conveyance:

☒ Assignment

☐ Merger

☐ Security Agreement

☐ Change of Name

Other: _____

Execution Date: September 17, 1998

2. Name and address of receiving party(ies):

Name: The Rockefeller University

Address: 1230 York Avenue

New York, New York 10021-6300

Additional name(s) & address(es) attached? ☐ Yes ☒ No

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: _____

A. Patent Application No.(s)

09/057,416

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: DAVID A. JACKSON

Address: KLAUBER & JACKSON

411 Hackensack Avenue, 4th Floor

Hackensack, New Jersey 07601

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41): \$40.00

☒ Enclosed

☐ Authorized to be charged to deposit account, if necessary - for overages or underpayments only

8. Deposit account number:

11-1153

(Attach duplicate copy of this page if paying by deposit account)

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9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

David A. Jackson, Reg. No. 26,742
Name of Person Signing

Signature

Date

9/28/98

10/02/1998 DNGUYEN 00000288 09057416

Total number of pages including cover sheet, attachments, and document: 3

01 FC:581

40.00 OP

Mail documents to be recorded with required cover sheet information to:

Assistant Commissioner for Patents
Box Assignments
Washington, D.C. 20231

ASSIGNMENT

WHEREAS, I

David Jeruzalmi
1161 York Avenue
Apartment 11i
New York, New York 10021

together with John Kuriyan, Michael E. O'Donnell and Olga Yurieva, have invented certain new and useful improvements in

**ENZYME DERIVED FROM THERMOPHILIC ORGANISMS THAT FUNCTIONS
AS A CHROMOSOMAL REPLICASE, AND PREPARATION
AND USES THEREOF**

for which I have filed an Application for Letters Patent in the United States on April 8, 1998, as U.S. Serial No. 09/057,416; and

WHEREAS,

THE ROCKEFELLER UNIVERSITY,
an education corporation organized and existing under
the laws of the State of New York,
with offices located at 1230 York Avenue,
New York, NY 10021-6399,

ASSIGNEE, is desirous of obtaining the entire right, title and interest in, to and under the said improvements and the said application;

NOW, THEREFORE, for other good and valuable consideration to me in hand paid, and other good and valuable consideration, the receipt of which is hereby acknowledged, I the said

ASSIGNOR,

have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, to the said

ASSIGNEE,

its successors, legal representatives and assigns, the entire right, title and interest in, to and under the said improvements, and the said application and all divisions, renewals, and continuations thereof, and all Letters Patent of the United States which may be granted thereon and all reissues and extensions thereof, and all applications for Letters Patent which may hereafter be filed for said improvements in any country or countries foreign to the United States, including the right to claim priority under the terms of any appropriate International

Convention based upon said application for Letters Patent of the United States, and all Letters Patent which may be granted for said improvements in any country or countries foreign to the United States and extensions, renewals and reissues thereof; and we hereby authorize and request the Commissioner of Patents and Trademarks of the United States and any official of any country or countries foreign to the United States, whose duty it is to issue patents on applications as aforesaid, to issue all Letters Patent for said improvements to the said

ASSIGNEE,

its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND WE HEREBY covenant that we have full right to convey the interest herein assigned in the manner hereinabove set forth, and that we have not executed, and will not execute, any agreement in conflict herewith.

AND WE HEREBY further covenant and agree that we will communicate to the said

ASSIGNEE,

its successors, legal representatives and assigns, any fact known to me respecting said improvements, and testify in any legal proceeding, sign all lawful papers, execute all divisions, continuing and reissue applications, make all rightful oaths and generally do everything possible to aid the said

ASSIGNEE,

its successors, legal representatives and assigns, to obtain and enforce proper Patent Protection for said improvements in the United States.

IN TESTIMONY WHEREOF, We hereunto set our hands and seals the day and year set opposite our respective signatures.

Date Sept 17, 1998

 L.S.
DAVID JERUZALMSKI

COPI

OCTOBER 26, 1998



**UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office**

ASSISTANT SECRETARY AND COMMISSIONER
OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

PTAS



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KLAUBER & JACKSON
DAVID A. JACKSON
411 HACKENSACK AVENUE
4TH FLOOR
HACKENSACK, NEW JERSEY 07601

**UNITED STATES PATENT AND TRADEMARK OFFICE
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PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 08/05/1998

REEL/FRAME: 9361/0099
NUMBER OF PAGES: 5

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:
KURIYAN, JOHN

DOC DATE: 07/07/1998

ASSIGNOR:
O'DONNELL, MICHAEL E.

DOC DATE: 07/22/1998

ASSIGNEE:
HOWARD HUGHES MEDICAL INSTITUTE
4000 JONES BRIDGE ROAD
CHEVY CHASE, MARYLAND 20815-6789

SERIAL NUMBER: 09057416
PATENT NUMBER:

FILING DATE: 04/08/1998
ISSUE DATE:

STEVEN POST, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

jc882 U.S. PTO
09/642218
08/18/00

8-5-98
08-07-1998FORM PTO-1595
(Rev. 6/93)100787859
PATENTS ONLY

HEET

U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

Attorney Docket No. 600-1-179N

To the Assistant Commissioner for Patents

1. Name of conveying party(ies):

John Kuriyan, Ph.D. and Michael E. O'Donnell, Ph.D.

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

3. Nature of conveyance:

☒ Assignment ☐ Merger
☐ Security Agreement ☐ Change of Name

Other: _____

Execution Date: July 7, 1998; and July 22, 1998

2. Name and address of receiving party(ies):

Name: Howard Hughes Medical InstituteAddress: 4000 Jones Bridge RoadChevy Chase, Maryland 20815-6789Additional name(s) & address(es) attached? ☐ Yes ☒ NoJC882 U.S. PTO
09/642218

08/18/00

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: _____

A. Patent Application No.(s)

09/057,416

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: DAVID A. JACKSONAddress: KLAUBER & JACKSON411 Hackensack Avenue, 4th FloorHackensack, New Jersey 076016. Total number of applications and patents involved: 17. Total fee (37 CFR 3.41): \$40.00☒ Enclosed☐ Authorized to be charged to deposit account, if necessary -
for overages or underpayments only

8. Deposit account number:

11-1153

(Attach duplicate copy of this page if paying by deposit account)

DO NOT USE THIS SPACE

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

David A. Jackson, Reg. No. 26,742

Name of Person Signing

Signature8/3/98
DateTotal number of pages including cover sheet, attachments, and document: 5

08/06/1998 DNGUYEN 00000180 09057416

01 FO:581

40.00 GP

Mail documents to be recorded with required cover sheet information to:

Assistant Commissioner for Patents
Box Assignments
Washington, D.C. 20231

ASSIGNMENT

Assignment made July 22, 1998, by Michael E. O'Donnell, Ph.D., a citizen of the United States residing at 16 Maple Avenue, Hastings-on-Hudson, New York 10706 ("Inventor") to the Howard Hughes Medical Institute, a Delaware corporation, having a principal business address at 4000 Jones Bridge Road, Chevy Chase, MD 20815-6789 (the "Institute").

Recitals

WHEREAS, Inventor is an employee of the Institute and, as a condition of his employment, has signed the Agreement appended to the Institute's Statement of Policy on Intellectual Property (the "Intellectual Property Agreement");

WHEREAS, pursuant to the Intellectual Property Agreement, Inventor has agreed (a) to assign to the Institute all rights he may acquire in any invention, discovery, improvement, or other intellectual property, whether or not patentable or copyrightable, developed directly or indirectly as a result of a program of research financed by Institute funds or by funds under the control of the Institute (each a "Subject Property") and (b) to execute any agreements that may be desired by the Institute in connection with such assignment;

WHEREAS, Inventor has, alone or with others, invented "Enzyme Derived From Thermophilic Organisms That Functions As A Chromosomal Replicase, And Preparation And Uses Thereof" (the "Invention"), and the Invention is a Subject Property; and

WHEREAS, Inventor seeks to make a formal assignment of his interest in the Invention to the Institute, and the Institute desires the execution of a formal assignment of all of Inventor's right, title, and interest in the Invention.

NOW, THEREFORE, in consideration of the promises contained in and the acts performed and to be performed pursuant to the Intellectual Property Agreement and of other good and valuable consideration, the receipt of which is hereby acknowledged by Inventor, Inventor agrees as follows:

1. Assignment. Inventor hereby assigns to the Institute his entire right, title, and interest in the Invention; any United States patent applications and all corresponding foreign patent applications which are directed to the Invention (including, without limitation, the patent application entitled invented "Enzyme Derived From Thermophilic Organisms That Functions As A Chromosomal Replicase, And Preparation And Uses Thereof" filed in the United States Patent and Trademark Office on April 8, 1998 with serial number 09/057,416), and any and all patents issued therefrom; all United States or foreign division and continuation applications based on any of the foregoing, and any and all patents issued therefrom; and all claims which are directed to the Invention and which may be contained in continuation-in-part applications or in patents which issue therefrom.

2. Cooperation. Inventor agrees to execute upon request such further assignments, documents, and other instruments as may be necessary or desirable to assign Inventor's entire right, title and interest in the Invention to the Institute and to assist the Institute (or others at the direction of the Institute) in applying for, obtaining, and enforcing patents, copy-rights, or other rights in the United States and in any foreign country with respect to the Invention.

3. Parties. The terms and provisions of this Assignment shall inure to the benefit of the Institute and its successors and assigns and shall be binding on Inventor and his heirs, personal representatives and assigns.

4. Warranty. Inventor warrants and represents that he has not entered into any assignment, contract, or understanding in conflict herewith, and that there is no other person or entity whose consent is required in order for the Inventor to make the assignment contained herein.

Inventor:

Michael E. O'Donnell
Michael E. O'Donnell, Ph.D.

State of New York
County of NY

Then personally appeared before me the above-named Michael E. O'Donnell and acknowledged that he executed the foregoing instrument as his free act and deed this 22 day of July, 1998.

Kathleen M. Hunter Notary Public

Kathleen M. Hunter (print name)

(SEAL)

My Commission expires 2/5/00

KATHLEEN M. HUNTER (CASSIDY)
Notary Public, State of New York
No. 4961476
Qualified in New York County
Term Expires February 5 2000

RU 339
HHMI 021934-96-00834

ASSIGNMENT

Assignment made July 7, 1998, by John Kuriyan, Ph.D., a citizen of the United States residing at 5060 Tippet Avenue, Riverdale, New York 10477 ("Inventor") to the Howard Hughes Medical Institute, a Delaware corporation, having a principal business address at 4000 Jones Bridge Road, Chevy Chase, MD 20815-6789 (the "Institute").

Recitals

WHEREAS, Inventor is an employee of the Institute and, as a condition of his employment, has signed the Agreement appended to the Institute's Statement of Policy on Intellectual Property (the "Intellectual Property Agreement");

WHEREAS, pursuant to the Intellectual Property Agreement, Inventor has agreed (a) to assign to the Institute all rights he may acquire in any invention, discovery, improvement, or other intellectual property, whether or not patentable or copyrightable, developed directly or indirectly as a result of a program of research financed by Institute funds or by funds under the control of the Institute (each a "Subject Property") and (b) to execute any agreements that may be desired by the Institute in connection with such assignment;

WHEREAS, Inventor has, alone or with others, invented "Enzyme Derived From Thermophilic Organisms That Functions As A Chromosomal Replicase, And Preparation And Uses Thereof" (the "Invention"), and the Invention is a Subject Property; and

WHEREAS, Inventor seeks to make a formal assignment of his interest in the Invention to the Institute, and the Institute desires the execution of a formal assignment of all of Inventor's right, title, and interest in the Invention.

NOW, THEREFORE, in consideration of the promises contained in and the acts performed and to be performed pursuant to the Intellectual Property Agreement and of other good and valuable consideration, the receipt of which is hereby acknowledged by Inventor, Inventor agrees as follows:

1. Assignment. Inventor hereby assigns to the Institute his entire right, title, and interest in the Invention; any United States patent applications and all corresponding foreign patent applications which are directed to the Invention (including, without limitation, the patent application entitled invented "Enzyme Derived From Thermophilic Organisms That Functions As A Chromosomal Replicase, And Preparation And Uses Thereof" filed in the United States Patent and Trademark Office on April 8, 1998 with serial number 09/057,416), and any and all patents issued therefrom; all United States or foreign division and continuation applications based on any of the foregoing, and any and all patents issued therefrom; and all claims which are directed to the Invention and which may be contained in continuation-in-part applications or in patents which issue therefrom.

2. Cooperation. Inventor agrees to execute upon request such further assignments, documents, and other instruments as may be necessary or desirable to assign Inventor's entire right, title and interest in the Invention to the Institute and to assist the Institute (or others at the direction of the Institute) in applying for, obtaining, and enforcing patents, copyrights, or other rights in the United States and in any foreign country with respect to the Invention.

3. Parties. The terms and provisions of this Assignment shall inure to the benefit of the Institute and its successors and assigns and shall be binding on Inventor and his heirs, personal representatives and assigns.

4. Warranty. Inventor warrants and represents that he has not entered into any assignment, contract, or understanding in conflict herewith, and that there is no other person or entity whose consent is required in order for the Inventor to make the assignment contained herein.

Inventor: _____

John Kuriyan
John Kuriyan, Ph.D.

State of New York

County of NY

Then personally appeared before me the above-named John Kuriyan and acknowledged that he executed the foregoing instrument as his free act and deed this 7 day of July, 1998.

Teresa L. Solomon Notary Public

(print name)

(SEAL)

My Commission expires / /

TERESA L. SOLOMON
Notary Public, State of New York
No. 31-4989836
Qualified in New York County
Commission Expires Dec. 16, 1999

RU 339
HHMI 021934-96-00834